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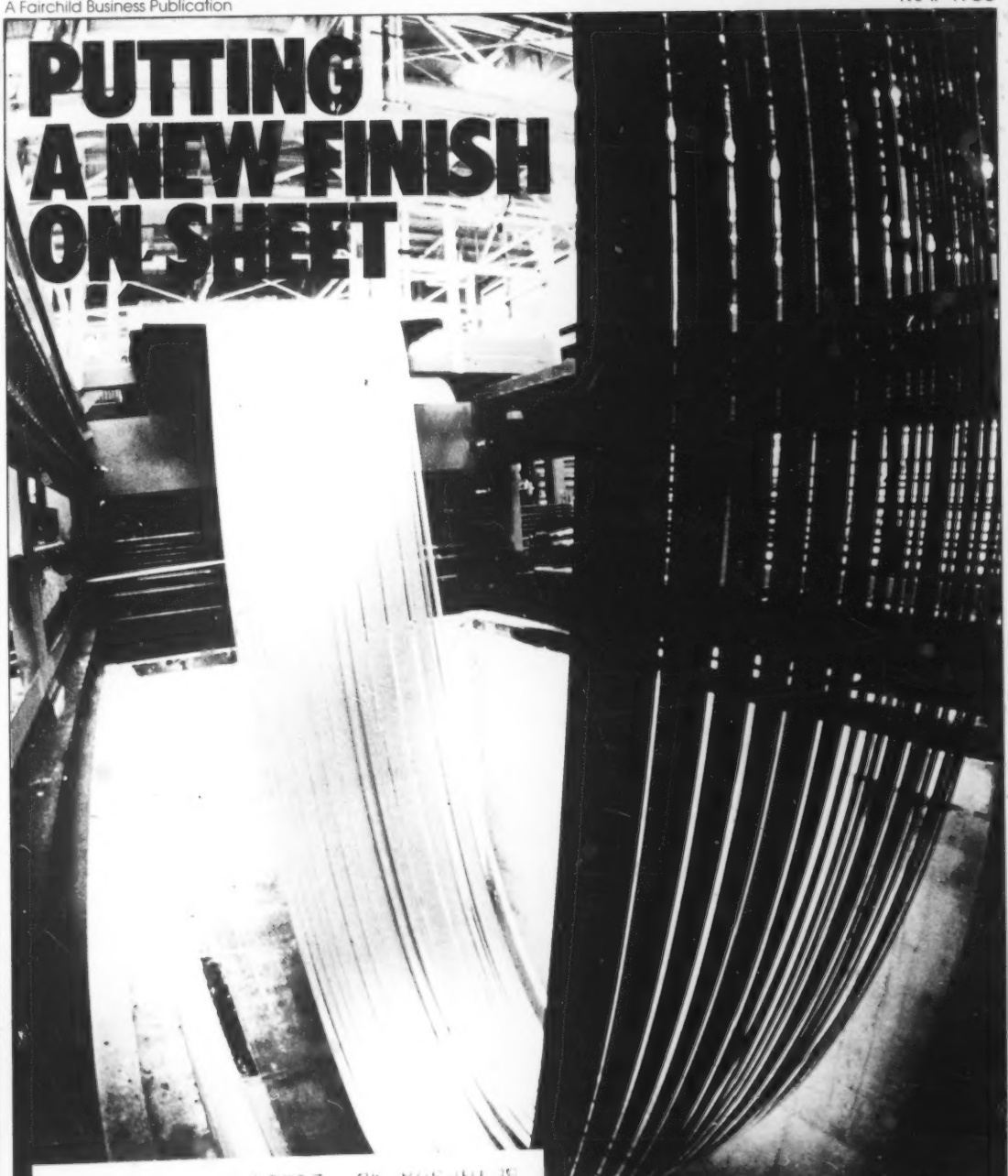
IRON AGE

THE MANAGEMENT MAGAZINE FOR METAL PRODUCERS

A Fairchild Business Publication

MAY 1988

PUTTING A NEW FINISH ON SHEET



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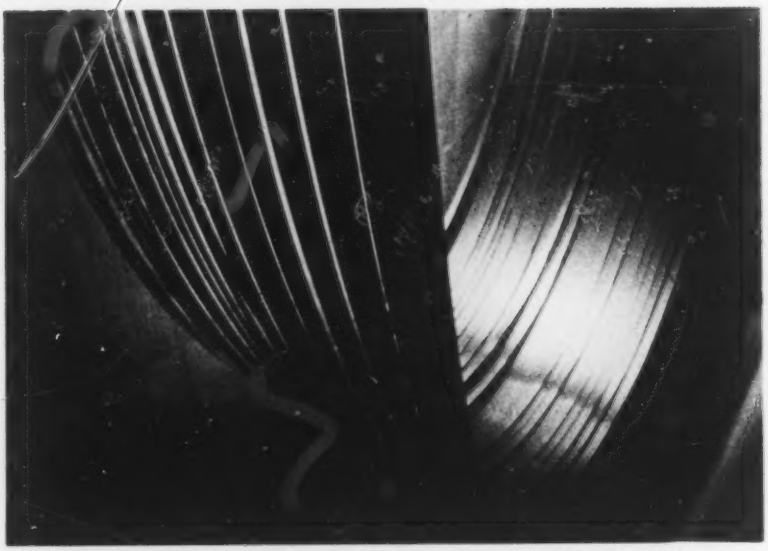

Newly slit sheet steel gathers in a looping pit at Ryerson's Chicago plant.

Putting A New Finish On Sheet P. 15

More and more, steelmakers are looking to outside processors to put the final touches on sheet.

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BPA

Manufacturing industries plan to boost capital spending in 1988 by 9.8 pct, the survey said. The durable goods industries expect a 6.8 pct increase, with blast furnaces, steel works and nonferrous metals producers planning the heftiest increases.

Overall, primary metals producers intend to raise their capital outlays by 15.1 pct this year. Steelmakers expect to up their spending by 17.8 pct and nonferrous metals producers are planning a 16.9 pct rise, the survey said.

Electrical machinery, fabricated metals and "other durables" plan on spending increases of 10 pct or higher this year. Smaller rises are expected in machinery, except electrical, stone-clay-glass and aircraft. A spending decline of nearly 5 pct is planned in automobiles.

If the total 8.8 pct spending hike is realized, it would be the largest upswing since a 9.6 pct leap in 1985, when real spending on capital goods reached $392.5 billion, the bureau said.

Spending for new plants in current dollars fell 0.9 pct last year, the report said, while spending for new equipment rose 3.9 pct.

The estimates are calculated quarterly from survey information based on inflation-adjusted dollars.

A previous Bureau of Economic Analysis survey released in December projected a 7.3 pct rise in capital spending in 1988. The new survey, conducted in January through March, projects a 2.8 pct capital spending hike in the first quarter of 1988 and a 0.9 pct increase in the second quarter.

"The year-to-year increase indicated in the latest survey is larger than that reported in the previous survey," the bureau said, "not only because 1988 planned spending was revised up, but also because 1987 actual spending was lower than planned."

Manufacturers are expecting a 5.4 pct spending increase in the first quarter of 1988, a 0.2 pct increase in the second quarter followed by a 2 pct decline from the first six months of 1988 to the last.

Alcoa claims a bigger serving of the food can market

The nation's newest canmaker may be providing the aluminum industry with the wider footing in the processed food can market that it has long desired.

Silgan Containers Corp. is operating what may be the most modern of canmaking plants in Fort Dodge, Iowa, in the heart of the nation's pantry, 70 miles northwest of Des Moines. The 50,000 sq ft plant cost about $14 million to build, employs about 85 workers (including office staff), but has the capacity to produce more than 1 billion cans and ends a year.

Output includes three-ounce and six-ounce cans as well as easy-open ends for six-ounce containers. Currently, all of the production from the Fort Dodge plant is shipped to the Friskies Pet Care Division of Carnation Co. And all of the product is drawn and redrawn from aluminum sheet, much of it supplied by the Aluminum Co. of America (Alcoa).

The food can market is the latest battleground where steel and aluminum are contesting for the hearts, minds and materials requirements of metalworking industries.

The aluminum industry supplies about 95 pct of the metal for the beverage can market – estimated at about 78 billion cans a year. Steel, on the other hand, has the lion's share of the 27 billion cans-a-year food market and aluminum holds only about 5 pct of the nation's canned foods.

If the current efforts of both Reynolds Metals Co. and Alcoa are any indication, they would like a large serving, please.

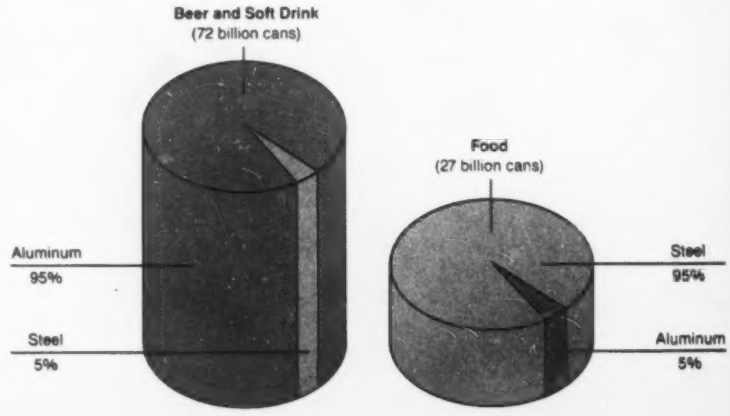
Now, thanks to Silgan, Alcoa has a bit more on its plate.

The Fort Dodge facility was part of the Carnation Can Division when ground was broken in October 1986. The following year, Carnation decided to quit the canmaking business. Two former Continental Can Co. executives, Phil Silver and Greg Horrigan, obtained financing from the New York investment bank, Morgan Stanley, to buy the canmaking facilities. Silver was a former president of Continental Can; Horrigan was its executive vice president.

By September the purchase was completed and a new company, initially called Canaco Corp., was established to run the 13 canmaking plants that were once part of Carnation. The company name's was later changed to Silgan Containers Corp., an amalgamation of the two founders' last names.

James D. Beam, the company's

1986 **U.S. Metal Can Shipments — Aluminum vs. Steel**



vice president of marketing and sales, says Silgan now is the second largest merchant canmaker in the U.S., though the company is less than a year old.

While still part of Carnation, the canmaking division initiated a program with Alcoa to develop a convenience package for its pet foods. Carnation's Friskies Pet Care Div. wanted to introduce its new Mighty Dog product to the market in a 307x111 (six-ounce) aluminum easy-open can.

Alcoa now supplies most, if not all, of the material to the Fort Dodge facility. Much of the metal is produced at the big aluminum producer's Warrick, Ind., plant.

It's not certain that Mighty Dog's success in the pet food market stems entirely from the easy-open aluminum containers. Aluminum industry marketers, nevertheless, contend it is a sign that pet owners are ready for an easy-open can. They note that many pet owners feel they need at least two can openers in the kitchen—one for the family and one for Fido.

Carnation now packages both Mighty Dog and its Fancy Feast cat food in easy-open aluminum cans and reportedly plans to widen its usage of convenience packaging.

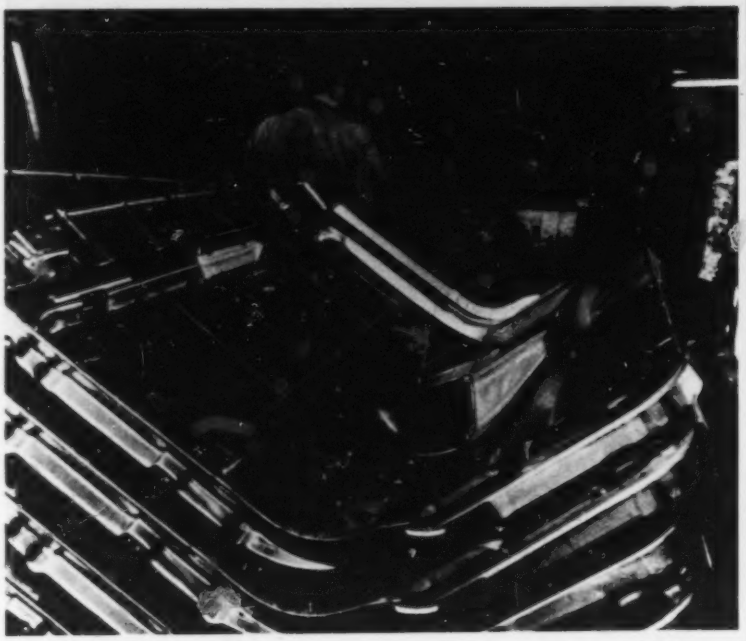
The big food processor's action has created a tremendous interest in convenience packaging throughout the food industry, said Mr. Beam.

There's an equally keen interest in the aluminum industry. Aluminum marketers see the 27 billion-cans-a-year food market as ripe for the picking.

Automakers cut steel costs by improving stamping operations

U.S. automakers are making improvements in stamping efficiency that could cut $350-400 from the cost of the automotive steel structure, or body-in-white, according to a study sponsored by the American Iron and Steel Institute (AISI).

As automakers cut stamping costs, the tooling cost of automotive steel are becoming more competitive with those of plastic. Until recently, automakers usually assumed that a chief advantage of plastic over steel is its lower tooling cost.



World-class stamping plants now produce fenders and doors in three or four press operations, compared to six or eight a few years ago.

The stamping study is being directed by Donald N. Smith, director of the Industrial Development Division based at the University of Michigan. Mr. Smith is working with the task force on tooling initiated by the AISI-sponsored Auto/Steel Partnership Program. "What started out as a steel vs. plastic study has really become redirected more toward enhancing steel panel productivity," explained Mr. Smith.

Based on an extensive study of automotive stamping plants in the U.S. and abroad, Mr. Smith has identified the key principles of a world class stamping plant.

"The single most important way to improve stamping efficiency is to limit the number of press operations," Mr. Smith told *Iron Age*. "World-class stamping plants now produce fenders and doors in as few as three or four press operations, compared to between six and eight just a few years ago."

To cut stamping operation, some automakers have redesigned complex panels into simpler shapes that can be formed by just two tandem presses, for example. Double-attaching two parts on one blank, that is, designing the shape so that two parts can be stamped with one blow of the press, is another tremendous booster of efficiency.

"You can eliminate 40 pct of the presses on a press line by using double-attaching," explained Mr. Smith. Honda's Marysville, Ohio, auto plant, for example, simultaneously stamps two doors from one blank.

General Motors' Lansing, Mich., plant uses only four press operations for some outer panels of the Buick Reatta.

"Three quarters of the tooling costs are already cast in concrete before the tool designers even get their hands on them," said Mr. Smith.

The best automakers are remedying this problem by using simul-

PRICE & PRODUCTION DATA

(Effective April 4, 1988)

Steel production by districts, thousands of tons (000 omitted)

	Last Week	Two Weeks Ago	Month Ago	Year Ago
Northeast Coast	289	291	284	196
Pittsburgh	195	204	194	194
Youngstown	112	124	122	116
Lake Erie	153	163	167	121
Detroit	168	174	172	154
Chicago	546	535	518	453
Midwest	183	177	197	194
Southern	223	225	221	170
Western	103	103	97	52
U.S. Production	1,972	1,996	1,971	1,650

Source: American Iron & Steel Institute

Lake Superior Ore Prices

51.50% Fe Natural delivered lower Lake ports unless otherwise stated. Rail transportation, handling and unloading may be charged to buyer. Coarse ore 80¢ premium.

Pellets (per iron unit natural) ..... gross-ton 37.344*
Pellets (per iron unit natural) ..... gross-ton 58.0-59.4**
Pellets (per iron unit natural) ..... gross-ton 72.45-86.9***
Mesabi, regular-unscreened ..... gross-ton 32.53
Mesabi, non-bessemer ..... gross-ton 30.03-31.53

*37.344¢—U.S. Steel, 5/20/87, FOB Mount Iron, Minn. **58.0¢—Mineral Services, 8/13/85. **59.4¢—Inland Steel Mining, 1/1/85; Pickands Mather, 8/1/85, delivered hold of vessel, upper Lake ports. ***72.45¢—Cleveland-Cliffs, 12/30/86; Oglebay Norton, 3/1/87. 86.9¢—Hanna Mining, 2/26/82.

STEEL PRODUCTION, COMPOSITE PRICES

(Effective April 4, 1988)

U.S. Steel Production	Last Week	Two Weeks Ago	To Date 1988	To Date 1987
Net tons, in thousands	1,972	1,996	25,697	19,468
Capability Utilization Rate	92.0	93.0	90.1	68.8

Composite Prices	This Week	Week Ago	Month Ago	Year Ago
Finished Steel Base* (¢/lb.—eff. 4/3/88)	24.333	24.223	24.223	25.236
Pig Iron** (Net ton= 2000 lbs.)	$213.00	$213.00	$213.00	$213.00
Scrap No. 1 hvy.*** (Gross ton=2240 lbs.)	$ 108.83	$ 109.50	$ 111.83	$ 73.17
No. 2 bundles	$ 73.83	$ 73.83	$ 75.50	$ 49.83

Scrap Comparison (Gross Ton)				
No. 1 steel, Pittsburgh	$ 112.50	$ 115.50	$ 120.50	$ 76.50
No. 1 steel, Philadelphia	96.50	96.50	98.50	70.50
No. 1 steel, Chicago	117.50	116.50	116.50	72.50
No. 1 bundles, Detroit	127.50	131.50	135.50	66.50
Low Phos., Youngstown	128.50	128.50	130.50	75.50
No. 1 mach'y cast., Pgh	100.50	100.50	102.50	74.50
No. 1 mach'y cast., Phila	111.50	111.50	111.50	93.50
No. 1 mach'y cast., Chi	134.50	134.50	134.50	93.50

*Finished Steel Composite: Weighted index of steel bars, structurals, plates, rails, hot rolled and cold rolled sheets.
**Pig Iron Composite: Based on average prices for basic and foundry pig iron at representative producing points within the U.S.
***Steel Scrap Composite: Average of No. 1 hvy. melting steel scrap and No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago.

NONFERROUS PRICES

(Effective April 4, 1988) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated.

Primary Metal Prices

(cents per lb.)	current price	last price	date of change
Aluminum (LME)	113.00	108.00	3/31/88
Copper (C)	115.00	109.00	3/31/88
Lead	34.00	37.00	2/8/88
Magnesium ingot	153.00	148.00	12/9/85
Nickel (LME)	705.00	803.00	3/31/88
Zinc	52.00	50.00	3/29/88

ALUMINUM: Avg. for last week & previous week. COPPER (C)=cathode. LEAD: common grade. MAGNESIUM: 99.8% pig, delivered. NICKEL: Avg. for last week & previous week. ZINC: high grade.

Antimony, American Laredo, Texas	$2.00
Beryllium-aluminum 5% Be, per lb. contained Be	$260.00
Beryllium-copper strip No. 25, per lb.Be	$8.00
Beryllium powder SP200F, per lb.	$244.00
Cadmium, ton lots	$1.50
Calcium, ton lots, crown	$3.92
Chromium, 99.5% electro	$4.62
Cobalt, 99%, cathode	$12.50
Gold, per troy oz.	$457.28
Indium, per troy oz.	$9.95
Iridium, per troy oz.	$325.00
Magnesium sticks, 10,000 lbs.	$2.12
Mercury, per 76-lb., f.o.b. N.Y.	$345.00
Molybdenum, lb. tech. moly oxides, 20 lb. MO can	$3.45
Palladium, per troy oz.	$126.00
Platinum, per troy oz.	$539.00
Rhodium, per troy oz.	$1,240.00
Silver ingots, per troy oz.	$6.83
Titanium sponge, melt grade	$4.00
Tungsten powder, hyd red.	$9.53-9.85
Vanadium	$6.00
Zirconium sponge	$11.20-17.00

(Per lb. unless otherwise noted)

Straits Tin Price

(U.S. cents per lb. EX-SMELTER, based on daily market in Kuala Lumpur in Malaysian dollars per kilo.)

Mar. 28—304.00 Mar. 31—302.00
Mar. 29—304.00 Apr. 1—302.00
Mar. 30—303.00

Scrap Prices
Brass Mill Scrap

(Cents per lb.; over 20,000 lbs. add 1¢ per lb.)

	Solids	Turnings
Copper	83	78
Yellow brass	71½	70½
Red brass	66½	62½
Comm. bronze	68	63
Mang. bronze	48	47
Free cutting rod ends	63½	62½

Custom Smelters Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	81
No. 2 copper wire	71
Light copper	65

Ingot Makers Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	72
No. 2 copper wire	63
Light copper	56
No. 1 composition	55
No. 1 comp. turnings	55
Hvy. yellow brass solids	40
Hvy. yellow brass turnings	34
Radiators	37

Dealers' Scrap

(Dealers' buying price f.o.b. New York in cents per pound)

Aluminum		
New mixed clips	66	— 67
Old sheet	55	— 56
Old cast	57	— 58
Clean dry borings	47	— 48

Aluminum		
Segregated clippings	58	— 59
Mixed I.C. clips	57	— 58
Old sheets and cast	48	— 49
Borings and turnings	40	— 41
Duraluminum clippings	49	— 50

Copper and Brass		
No. 1 copper wire	68	— 70
No. 2 copper wire	58	— 59
Light copper	52	— 53
Radiators	37	— 38
No. 1 composition	56	— 57
No. 1 composition turnings	52	— 53
Cocks and faucets	46	— 47
Clean heavy yellow brass	42	— 43
Brass pipe	50	— 51
New soft brass clippings	62	— 63

Lead		
Heavy soft lead	12	— 13
Whole batteries	2	— 3
Type metal	21	— 22
Electrotype	13	— 14

Nickel		
Nickel solids	350	—360
Nickel rod ends	343	—353
Nickel sheets, dips	343	—353
Nickel turnings	179	—199

Zinc		
New zinc clippings	18	— 19
Old diecast zinc	14	— 15

EFFECTIVE APRIL 4, 1988

(Effective April 4, 1988) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise noted. Prices are the opinions of Iron Age editors and correspondents, based on contacts with dealers, brokers, generators and users in the industry on the effective date listed above.

Ferrous Scrap Prices

Pittsburgh

No. 1 hvy. melting	$ 112.00 to	$ 113.00
No. 2 hvy. melting	102.00 to	103.00
No. 1 dealer bundles	141.00 to	142.00
No. 1 factory bundles (auto)	150.00 to	151.00
No. 2 bundles	69.00 to	70.00
No. 1 bushelings	141.00 to	142.00
Machine shop turnings	23.00 to	24.00
Shoveling turnings	69.00 to	70.00
Cast iron borings	68.00 to	69.00
Low phos. punchings plate	152.00 to	153.00
Heavy turnings	102.00 to	103.00
No. 1 RR hvy. melting	131.00 to	132.00
Rails, 2 ft. and under	166.00 to	167.00
Scrap rails, random lgth	146.00 to	147.00
RR specialties	151.00 to	152.00
No. 1 machinery cast	100.00 to	101.00
Cupola cast	92.00 to	93.00
Heavy breakable cast	40.00 to	41.00
Stainless		
18-8 bundles and solids	1,190.00 to	1,200.00
18-8 turnings	1,090.00 to	1,100.00

Chicago

No. 1 hvy. melting	$ 117.00 to	$ 118.00
No. 2 hvy. melting	112.00 to	113.00
No. 1 dealer bundles	133.00 to	134.00
No. 1 factory bundles (auto)	134.00 to	135.00
No. 2 dealer bundles	85.00 to	86.00
No. 1 busheling	131.00 to	132.00
Shredder scrap	130.00 to	131.00
Machine shop turnings	55.00 to	56.00
Mixed borings and turnings	47.00 to	48.00
Shoveling turnings	64.00 to	65.00
Cast iron borings	69.00 to	70.00
Low phos. forge crop	160.00 to	161.00
Low phos. punchings plate 1/4 in. and heavier	176.00 to	177.00
Low phos. 2 ft. and under	171.00 to	172.00
No. 1 RR hvy. melting	122.00 to	123.00
Scrap rails random lgth	145.00 to	146.00
Reroller rails	159.00 to	160.00
Rails, 2 ft. and under	173.00 to	174.00
RR couplers and knuckles	139.00 to	140.00
RR car axles	164.00 to	165.00
No. 1 machinery cast	134.00 to	135.00
Cupola cast	114.00 to	115.00
Stove plate	134.00 to	135.00
Steel car wheels	159.00 to	160.00
Stainless		
18-8 bundles and solids	1,150.00 to	1,160.00
18-8 turnings	1,000.00 to	1,010.00
430 bundles and solids	240.00 to	250.00
430 turnings	155.00 to	165.00

Philadelphia

No. 1 hvy. melting	$ 95.00 to	$ 98.00
No. 2 hvy. melting	85.00 to	88.00
No. 1 dealer bundles	137.00 to	140.00
No. 2 dealer bundles	65.00 to	68.00
No. 1 busheling	127.00 to	130.00
Shredder scrap	120.00 to	123.00
Machine shop turnings	29.00 to	32.00
Mixed borings and turnings	29.00 to	32.00
Shoveling turnings	50.00 to	53.00
Low phos. 5 ft. and under	118.00 to	121.00
Low phos. 2 ft. punchings	140.00 to	143.00
Electric furnace bundles	140.00 to	143.00
RR specialties	124.00 to	127.00
Rails, 2 ft. and under	145.00 to	148.00
Cupola cast	100.00 to	103.00
Heavy breakable cast	52.00 to	55.00
No. 1 machinery cast	110.00 to	113.00

Detroit

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 78.00 to	$ 79.00
No. 2 hvy. melting	76.00 to	77.00
No. 1 dealer bundles	127.00 to	128.00
No. 2 bundles	55.00 to	56.00
No. 1 busheling	125.00 to	126.00
Drop forge flashings	75.00 to	76.00
Machine shop turnings	53.00 to	54.00
Mixed borings and turnings	25.00 to	26.00
Shoveling turnings	53.00 to	54.00
Cast iron borings	59.00 to	60.00
Heavy breakable cast	45.00 to	46.00
Mixed cupola cast	62.00 to	63.00
Automobile cast	84.00 to	85.00
Stainless		
18-8 bundles and solids	1,100.00 to	1,110.00
18-8 turnings	850.00 to	860.00
430 bundles and solids	240.00 to	250.00

Youngstown

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 101.00 to	$ 102.00
No. 2 hvy. melting	91.00 to	92.00
No. 1 dealer bundles	128.00 to	129.00
No. 2 dealer bundles	58.00 to	59.00
Machine shop turnings	45.00 to	46.00
Shoveling turnings	45.00 to	46.00
Low phos. plate	128.00 to	129.00
Electric furnace bundles	131.00 to	132.00
Galvanized bundles	129.00 to	130.00

Cleveland

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 95.00 to	$ 96.00
No. 2 hvy. melting	84.00 to	85.00
No. 1 dealer bundles	128.00 to	129.00
No. 1 factory bundles	134.00 to	135.00
No. 2 bundles	52.00 to	53.00
No. 1 busheling	124.00 to	125.00
Machine shop turnings	50.00 to	51.00
Shoveling turnings	50.00 to	51.00
Cast iron borings	50.00 to	51.00
Cut structural & plates, 5 ft. and under	111.00 to	112.00
Cut structural & plates, 2 ft. and under	138.00 to	139.00
Low phos. punchings plate	144.00 to	145.00
Foundry steel, 2 ft. & under	88.00 to	89.00
No. 1 RR hvy. melting	105.00 to	106.00
Rails, 2 ft. and under	151.00 to	152.00
Rails, 18 in. and under	133.00 to	134.00
No. 1 machinery cast	88.00 to	89.00
Mixed cast	53.00 to	54.00
Stainless		
18-8 bundles	1,105.00 to	1,115.00
18-8 turnings	855.00 to	865.00
430 bundles	245.00 to	255.00

Buffalo

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 90.00 to	$ 91.00
No. 2 hvy. melting	82.00 to	83.00
No. 1 busheling	125.00 to	126.00
No. 1 dealer bundles	125.00 to	126.00
No. 2 bundles	46.00 to	47.00
Machine shop turnings	28.00 to	29.00
Mixed borings and turnings	28.00 to	29.00
Shoveling turnings	34.00 to	35.00
Cast iron borings	37.00 to	38.00
Low phos. plate	124.00 to	125.00
Structural and plate, 2 ft. and under	134.00 to	139.00
Rails, 2 ft. and under	139.00 to	140.00
Scrap rails, random lgth	114.00 to	115.00
No. 1 machinery cast	104.00 to	105.00
No. 1 cupola cast	87.00 to	88.00

St. Louis

No. 1 hvy. melting	$ 104.00 to	$ 105.00
No. 2 hvy. melting	84.00 to	85.00
No. 1 busheling	129.00 to	130.00
No. 1 dealer bundles	132.00 to	133.00
No. 2 bundles	87.00 to	88.00
Machine shop turnings	49.00 to	50.00
Shoveling turnings	53.00 to	54.00
Cast iron borings	57.00 to	58.00
No. 1 RR hvy. melting	123.00 to	124.00
Rails, random length	113.00 to	114.00
Rails, 5 ft. and under	134.00 to	135.00
Plate and structural, 5 ft. and under	123.00 to	124.00
Cupola cast	89.00 to	90.00
Heavy breakable cast	43.00 to	44.00
Stove plate	112.00 to	113.00
Steel car wheels	132.00 to	133.00
Rerolling rails	130.00 to	131.00
Unstripped motor blocks	66.00 to	67.00

Birmingham

No. 1 hvy. melting	$ 99.00 to	$ 100.00
No. 2 hvy. melting	95.00 to	96.00
No. 1 dealer bundles	105.00 to	106.00
No. 2 bundles	80.00 to	81.00
No. 1 busheling	102.00 to	103.00
Shredder scrap	124.00 to	125.00
Machine shop turnings	42.00 to	43.00
Shoveling turnings	55.00 to	56.00
Cast iron borings	35.00 to	36.00
Electric furnace bundles	84.00 to	85.00
Elec. furnace, 3 ft. & under	99.00 to	100.00
Structural and plate, 2 ft.	139.00 to	140.00
Structural and plate, 4 ft.	129.00 to	130.00
No. 1 RR hvy. melting	129.00 to	130.00
Scrap rails, random lgth	124.00 to	125.00
Rails, 2 ft. and under	150.00 to	151.00
Angles and splice bars	129.00 to	130.00
No. 1 cupola cast	105.00 to	106.00
Unstripped motor blocks	94.00 to	95.00

Cincinnati

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 96.00 to	$ 97.00
No. 2 hvy. melting	86.00 to	87.00
No. 1 dealer bundles	120.00 to	121.00
No. 2 bundles	63.00 to	64.00
No. 1 busheling	120.00 to	121.00
Machine shop turnings	30.00 to	31.00
Shoveling turnings	40.00 to	41.00
Cast iron borings	43.00 to	44.00
Low phos. 18 in. and under	132.00 to	133.00
Rails, random length	116.00 to	117.00
Rails, 2 ft. and under	132.00 to	133.00
No. 1 cupola cast	96.00 to	97.00
Heavy breakable cast	59.00 to	60.00
Drop broken cast	110.00 to	111.00

New York

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 69.00 to	$ 71.00
No. 2 hvy. melting	61.00 to	62.00
No. 2 dealer bundles	35.00 to	37.00
Mixed borings and turnings	10.00 to	11.00
Shoveling turnings	10.00 to	12.00
Clean cast, chem. borings	37.00 to	38.00
No. 1 machinery cast	80.00 to	81.00
Mixed yard cast	53.00 to	54.00
Heavy breakable cast	17.00 to	19.00
Stainless		
18-8 prepared solids	770.00 to	790.00
18-8 turnings	490.00 to	510.00
430 prepared solids	170.00 to	180.00
430 solids	185.00 to	195.00

Boston

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 70.00 to	$ 72.00
No. 2 hvy. melting	60.00 to	62.00
No. 1 dealer bundles	88.00 to	90.00
No. 2 bundles	33.00 to	35.00
No. 1 busheling	83.00 to	85.00
Shredder scrap	78.00 to	80.00
Machine shop turnings	18.00 to	20.00
Shoveling turnings	23.00 to	25.00
No. 1 machinery cast	85.00 to	87.00
Mixed cupola cast	44.00 to	46.00
Heavy breakable cast	22.00 to	24.00

San Francisco

No. 1 hvy. melting	$ 63.00 to	$ 65.00
No. 2 hvy. melting	57.00 to	59.00
No. 1 dealer bundles	55.00 to	57.00
No. 2 dealer bundles	43.00 to	44.00
Machine shop turnings	15.00 to	16.00
Cast iron borings	15.00 to	16.00
No. 1 cupola cast	87.00 to	89.00

Los Angeles

No. 1 hvy. melting	$ 73.00 to	$ 75.00
No. 2 hvy. melting	67.00 to	69.00
No. 1 dealer bundles	65.00 to	67.00
No. 2 dealer bundles	47.00 to	49.00
Machine shop turnings	17.00 to	18.00
Shoveling turnings	18.00 to	19.00
Cast iron borings	18.00 to	19.00
Elec. furnace, 1 ft. and under (foundry)	80.00 to	82.00
No. 1 cupola cast	84.00 to	86.00

Seattle

No. 1 hvy. melting	$ 94.00 to	$ 95.00
No. 2 hvy. melting	84.00 to	85.00
No. 2 bundles	69.00 to	70.00
No. 1 cupola cast	99.00 to	100.00
Mixed yard cast	85.00 to	87.00

Hamilton, Ont.

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 103.00
No. 2 hvy. melting, cut 2 ft. and under	90.00
No. 1 dealer bundles	128.00
No. 2 bundles	79.00
Mixed steel scrap	73.00
Bush. new fact. prep'd	123.00
Bush. new fact. unprep'd	99.00
Machine shop turnings	31.00
Short steel turnings	31.00
Mixed borings and turning	25.00
Cast scrap	102.00

Houston

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 99.00 to	$ 100.00
No. 2 hvy. melting	89.00 to	90.00
No. 2 bundles	52.00 to	53.00
Machine shop turnings	37.00 to	38.00
Crushed turnings	47.00 to	48.00
Shredder scrap	107.00 to	108.00
Cut structural plate, 2 ft. and under	122.00 to	123.00
Cut structural plate, 5 ft. and under	110.00 to	111.00
Unstripped motor blocks	60.00 to	61.00
Cupola cast	95.00 to	96.00